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July 7, 2021

**VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd  
Chief Clerk/Executive Director  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia SC 29210

**Re: Duke Energy Carolinas, LLC Informational Filing on Depreciation Studies**

Dear Ms. Boyd:

Duke Energy Carolinas, LLC (“DEC” or “the Company”) provides this letter as to the current status of the Company’s depreciation studies. DEC’s depreciation studies were last approved in Order No. 2019-323 in Docket No. 2018-319-E, issued on May 21, 2019. As a result of normal periodic review of the Companies’ depreciation for compliance with General Accepted Accounting Principles, DEC commissioned updated studies of its depreciation schedules. Based on the results of these studies, the Company has determined that it is appropriate to update its depreciation schedules.

DEC’s preliminary depreciation expense study is attached as Exhibit A. This depreciation study was commissioned per normal course in DEC’s recent rate case in North Carolina for use in ratemaking and setting customer rates. On March 31, 2021, the North Carolina Utilities Commission (“NCUC”) issued an order adopting DEC’s depreciation schedules based on the depreciation study provided in Exhibit A, with the following exceptions:

- (1) Continue to use a 10 percent contingency for terminal costs instead of the 20 percent contingency that was originally proposed in the depreciation study for terminal costs;
- (2) Use a zero percent interim net salvage percentage for Accounts 342 [Fuel Holders, Producers, and Accessories], 343 [Prime Movers], 344 [Generators], 345 [Accessory Electric Equipment], and 346 [Miscellaneous Power Plant Equipment] instead of the negative 6 percent interim net salvage percentage that was originally proposed in the depreciation study; and

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- (3) Continue to use the remaining useful lives presented in the Company's 2016 depreciation study, instead of the accelerated lives proposed in the most recent depreciation study to determine the depreciation for Allen Units 4 and 5 and Cliffside Unit 5 generating units.

These adjustments resulted in a decrease to annual total system depreciation expense as calculated in the originally proposed depreciation study of \$40.1 million, with impacts to the following functions:

- a) A decrease to Steam Production Plant of \$37 million, which is primarily related to the modified Allen and Cliffside depreciable lives, as well as the reduced contingency for terminal costs;
- b) A decrease to Hydraulic Production Plant of \$0.4 million due to the reduced contingency for terminal costs; and
- c) A decrease to Other Production Plant of \$2.7 million due to the reduced contingency for terminal costs and zero percent interim net salvage.

Subsequent to the order from the NCUC, DEC finalized its depreciation study. The finalized study results in an approximate annual increase in depreciation expense of \$74.9 million on a total system basis (\$16.8 million on a South Carolina retail basis) when applied to end of 2020 plant balances. As explained above, Exhibit B shows the results of the finalized depreciation study for depreciation schedules to be effective June 1, 2021.

#### Revised Nuclear Deprecation Study Effective April 1, 2021

Duke Energy's nuclear fleet is comprised of 11 reactors at 6 nuclear stations across its North and South Carolina service territories. For DEC, the fleet consists of 7 reactors at 3 stations (Catawba, McGuire, and Oconee). The Nuclear Regulatory Commission ("NRC") oversees the design, construction, and operations of the nuclear generating facilities in the United States. As part of the NRC regulations, a nuclear license is required to operate a facility. An initial 40-year term is granted for nuclear reactor licenses and subsequent license renewals are permitted for additional 20-year increments. All Duke Energy-operated nuclear units have received one renewed license for an additional 20 years and are therefore currently licensed to operate for a total life of 60 years. The NRC staff has defined subsequent license renewal ("SLR") to be the period of extended operation from 60 years to 80 years.

On September 19, 2019, Duke Energy announced its intent to seek SLRs for its reactors. Duke Energy's nuclear fleet generates about half of its Carolinas customers' electricity, carbon-free, and plays an important role in the company's efforts to lower overall carbon emissions by at least 50% by 2030 and be carbon neutral by 2050. Renewing the nuclear licenses will also provide significant value to Duke Energy customers, ensuring a source of reliable and affordable energy for decades to come, as well as continue to support Carolinas' communities through jobs,

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tax revenues and partnerships. The September 19, 2019 announcement noted that Duke Energy expected to submit the first SLR application for Oconee Nuclear Station in 2021, followed by its other nuclear stations. Duke Energy submitted its SLR application for Oconee Units 1, 2, and 3 on June 7, 2021, and provided notice to the Commission of such filing.

Duke Energy conducts periodic depreciation studies, absent regulatory activity, due to material changes in business conditions. Accordingly, Duke Energy engaged Gannett Fleming to perform depreciation studies to develop analyses and recommendations regarding the impact of the planned SLRs on the depreciable lives of the nuclear stations located in the Carolinas based on the December 31, 2020 nuclear production plant balances. Based on this assessment and in accordance with accounting guidance that the expected lives of all of Duke Energy's nuclear units should be extended at the same time that the Oconee lives are extended, effective with the June 7, 2021 date of management approval of the Oconee SLR application, DEC has revised the nuclear plant useful lives being used in the calculation of depreciation expense to assume an additional 20 years of nuclear operation, consistent with the SLR application for Oconee.

The effective date of April 1, 2021 for the revised nuclear depreciation schedules is consistent with guidance from FASB Accounting Standards Codification ("ASC") 250. As outlined in ASC 250, the implementation of these new depreciation schedules is determined to be a change in an accounting estimate because the updated studies are updating the services lives of depreciable nuclear assets. Accordingly, ASC 250 instructs that the change in accounting estimate shall be effective prospectively in the period in which the new depreciation schedules are implemented, as well as future periods, but will not require restating or retroactively adjusting prior amounts reported. As Duke Energy is required to file quarterly and annual financial reports with the Securities and Exchange Commission, the Company believes it is appropriate, in this context, to define the period for which the revised nuclear depreciation schedules are implemented as the beginning of the quarter in which the triggering event occurred. Therefore, since the triggering event occurred in June 2021, the Company is revising its nuclear depreciation schedules be implemented effective the beginning of the second quarter of 2021 (i.e., April 1, 2021). Accordingly, the finalized study establishing revised depreciation schedules for DEC's nuclear units as of April 1, 2021 results in an approximate annual decrease in depreciation expense of \$132.5 million on a total system basis (\$30.5 million on a South Carolina retail basis) when applied to end of 2020 nuclear production plant balances in comparison to the revised depreciation study schedules discussed above.

The combined impact of these revised depreciation studies results in an approximate annual net decrease in depreciation expense of \$57.6 million on a total system basis (\$13.7 million on a South Carolina retail basis) when applied to end of 2020 plant balances.

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Adoption and implementation of the new depreciation schedules will not involve a change to any of the Company's customer rates at this time, or to any Commission rule, regulation, or policy.

Sincerely,



Heather Shirley Smith

Attachment

cc: Nanette S. Edwards, Executive Director, Office of Regulatory Staff (via email)  
Dawn Hipp, Chief Operating Officer, Office of Regulatory Staff (via email)  
Jeffrey M. Nelson, Chief Legal Officer, Office of Regulatory Staff (via email)  
Andrew M. Bateman, Esq., Office of Regulatory Staff (via email)  
Carri Grube Lybarker, Consumer Advocate, SC Dept of Consumer Affairs (via email)  
Roger P. Hall, Deputy Consumer Advocate, SC Dept of Consumer Affairs (via email)